

EXHIBIT 4

**Redacted Version of
Document Sought to be
Sealed**

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

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CHASOM BROWN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)

Plaintiffs,) Case No.

) 5:20-cv-03664-LHK

vs.)

GOOGLE LLC,)

Defendant.)

-----)

---o0o---

Videotaped Zoom Deposition of

MANDY LIU

CONFIDENTIAL

Tuesday, March 8, 2022

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Katy E. Schmidt
RPR, RMR, CRR, CSR 13096
Job No.: 5121622

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1 Q. And if you know, was this project Bert's idea 07:18
2 or did someone else come up with the idea? 07:18
3 MR. ANSORGE: Objection. Form. 07:18
4 THE WITNESS: I'm not sure who came up with 07:18
5 this idea. 07:18
6 BY MR. FRAWLEY: 07:18
7 Q. But it wasn't Bert? 07:18
8 A. I'm not sure. 07:18
9 Q. Now, can you go back a couple of pages to the 07:18
10 page that ends in Bates 925? 07:18
11 A. Yeah. I'm looking at it. 07:19
12 Q. And do you see the entry for February 11th, 07:19
13 2020? 07:19
14 A. Yes. 07:19
15 Q. Okay. Now, just go back down two pages to the 07:19
16 Bates ending in 927. 07:19
17 A. Mm-hm. 07:19
18 Q. And now do you see the "Browser Intelligence" 07:19
19 bullet at the top? 07:19
20 A. Yes. 07:19
21 Q. And then do you see the sub-bullet "Working on 07:19
22 [REDACTED] bit" in bold? 07:19
23 A. Yes. 07:19
24 Q. So the [REDACTED] bit was part of 07:19
25 the browser intelligence project? 07:19

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1 A. Yes. 07:20

2 Q. And at that point, in February 2020, was 07:20

3 anyone else besides you working on the 07:20

4 [REDACTED] bit? 07:20

5 MR. ANSORGE: Objection. Vague. 07:20

6 THE WITNESS: I only know that I am the only 07:20

7 one who has been working on the [REDACTED] 07:20

8 bit. 07:20

9 BY MR. FRAWLEY: 07:20

10 Q. And what is [REDACTED]? 07:20

11 A. [REDACTED] 07:20

12 Q. Do you know why it's called [REDACTED]? 07:20

13 A. I'm not sure. 07:20

14 Q. Do you know if it is referring to a [REDACTED] 07:21

15 [REDACTED]? 07:21

16 A. I don't know. 07:21

17 Q. And in February 2020, while you were working 07:21

18 on the [REDACTED] bit, who at Google was 07:21

19 aware of your work? 07:21

20 MR. ANSORGE: Objection. Vague, and 07:21

21 foundation. 07:21

22 THE WITNESS: Can you be more specific about 07:21

23 which work you're talking about? 07:21

24 BY MR. FRAWLEY: 07:21

25 Q. The work on the [REDACTED] bit 07:21

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1 that is being referenced in this document. 07:21

2 And my question is: Who else knew that you 07:21

3 were working on that? 07:21

4 MR. ANSORGE: Same objection. 07:21

5 THE WITNESS: Do you mean who else in Google? 07:22

6 MR. FRAWLEY: Yes. 07:22

7 THE WITNESS: And -- there are a few people 07:22

8 who knew that I was working on this, but I don't 07:22

9 remember exactly how many or who are they. 07:22

10 BY MR. FRAWLEY:

11 Q. Off the top of your head, can you think of 07:22

12 anybody? 07:22

13 A. Bert and Chris for sure. 07:22

14 Q. Okay. I'm going to introduce another exhibit. 07:23

15 (Plaintiffs' Exhibit 2 was 07:23

16 marked for identification.) 07:23

17 BY MR. FRAWLEY: 07:23

18 Q. Okay. I've introduced Exhibit 2. 07:23

19 Please let me know when you have Exhibit 2 in 07:23

20 front of you. 07:23

21 And I apologize but the stamp says "Exhibit 1" 07:23

22 again. We'll fix that later. Let's just call this 07:23

23 Exhibit 2. 07:24

24 MR. ANSORGE: So it's Exhibit 1, Tab D that 07:24

25 we're looking at now? 07:24

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1 MR. FRAWLEY: This would be Tab 3. 07:24

2 MR. ANSORGE: Tab 3. Okay. Got it. 07:24

3 MR. FRAWLEY: Yeah. Sorry. 07:24

4 MR. ANSORGE: Got it. 07:24

5 MR. FRAWLEY: The stamp Is the most fun part 07:24

6 to me and I always mess it up. Okay. Sorry. 07:24

7 THE WITNESS: Yes. I'm looking at it. 07:24

8 BY MR. FRAWLEY: 07:24

9 Q. Okay. So just so we're all on the same page, 07:24

10 and I apologize, you're looking at the document that's a 07:24

11 September 17th, 2020 e-mail from Bert Leung; correct? 07:24

12 A. Yes. 07:24

13 Q. Okay. Thank you. And I apologize. 07:24

14 Can you look at the second page? 07:24

15 MR. ANSORGE: And, Ms. Liu, you're well within 07:24

16 your rights to familiarize yourself with the whole 07:24

17 document. 07:24

18 THE WITNESS: Okay. 07:24

19 Yeah. I'm looking at the second page. 07:25

20 BY MR. FRAWLEY: 07:25

21 Q. Okay. Do you see the e-mail about a third of 07:25

22 the way down, there is a July 13, 2020 e-mail at 07:25

23 8:44 a.m. from Chris Liao? 07:25

24 A. Yes. 07:25

25 Q. And do you see where Chris Liao wrote "The 07:25

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1 [REDACTED] bit itself is already inferred"? 07:25

2 A. Mm-hm. 07:25

3 Q. So the [REDACTED] that's the same 07:25

4 thing as the [REDACTED] bit that we were 07:25

5 talking about from the prior document; correct? 07:25

6 A. I'm not sure if Chris meant that. 07:25

7 Q. If you know, were there any other bits about 07:25

8 incognito that he might have been referring to instead? 07:26

9 MR. ANSORGE: Objection. Form and foundation. 07:26

10 THE WITNESS: I don't know other bits for 07:26

11 incognito. 07:26

12 BY MR. FRAWLEY: 07:26

13 Q. And then do you see just above where he wrote 07:26

14 "We should probably rename that to [REDACTED] and 07:26

15 link to the documentation"? 07:26

16 A. Yes. 07:26

17 Q. So it sounds like from this -- and correct me 07:26

18 if I'm wrong -- the name started as [REDACTED], 07:26

19 then it changed to [REDACTED], and now Chris Liao was 07:26

20 saying "let's change it back to [REDACTED]"? 07:26

21 Is that right? 07:26

22 MR. ANSORGE: Objection. Form and foundation. 07:26

23 THE WITNESS: What I can read from this e-mail 07:27

24 is that it changed from [REDACTED] to [REDACTED]. 07:27

25 ///

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1 BY MR. FRAWLEY: 07:27

2 Q. And before this, did it ever change from 07:27

3 [REDACTED] to [REDACTED]? 07:27

4 MR. ANSORGE: Objection. Foundation. 07:27

5 THE WITNESS: Sorry. The light is... 07:27

6 MR. FRAWLEY: It's okay. 07:27

7 THE WITNESS: I don't know. If it's a 07:27

8 [REDACTED] before. 07:27

9 BY MR. FRAWLEY: 07:27

10 Q. And right now does Chris Liao have any 07:27

11 responsibility for the [REDACTED] bit? 07:28

12 MR. ANSORGE: Objection. Foundation. 07:28

13 THE WITNESS: I don't know if he has. 07:28

14 BY MR. FRAWLEY: 07:28

15 Q. When was the last time you talked to 07:28

16 Chris Liao about the [REDACTED] bit? 07:28

17 A. I don't remember. 07:28

18 Q. Do you think it was more than six months ago 07:28

19 or less? 07:28

20 A. I don't remember. 07:28

21 Q. And at this time, in July 2020, if you know, 07:29

22 were any lawyers involved in the [REDACTED] bit? 07:29

23 MR. ANSORGE: Objection. Vague and form. 07:29

24 THE WITNESS: Well, first of all, I want to 07:29

25 clarify the [REDACTED] bit should -- you are 07:29

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1 talking about should be the [REDACTED] Boolean 07:29

2 field. 07:29

3 And about the lawyers, I don't know. 07:29

4 BY MR. FRAWLEY: 07:29

5 Q. And thank you for that clarification. 07:29

6 Can you explain to me what is a Boolean field? 07:29

7 A. A Boolean field is a type of data container 07:30

8 that only contains value that is either true or false. 07:30

9 Q. Okay. I'm going to introduce another exhibit. 07:30

10 (Plaintiffs' Exhibit 3 was 07:30

11 marked for identification.) 07:30

12 BY MR. FRAWLEY: 07:31

13 Q. Okay. Today is not my day with marking 07:31

14 exhibits. We'll call this Exhibit 3, even though 07:31

15 there's no stamp. 07:31

16 Let me know when you have this document in 07:31

17 front of you, Ms. Liu. 07:31

18 A. Is it the Exhibit 3, Tab 1? 07:31

19 Q. That's correct. I'm sorry that I'm making it 07:31

20 confusing with the different numbers. 07:31

21 A. That's okay. 07:31

22 Q. My question here is about the fourth page of 07:31

23 this document. 07:31

24 MR. ANSORGE: Ms. Liu, you're well within your 07:31

25 rights to familiarize yourself with the document. 07:31

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1 THE WITNESS: Okay. Thank you. 07:31

2 Would you please tell me the Bates number for 07:32

3 the page? 07:32

4 BY MR. FRAWLEY:

5 Q. Yes. 07:32

6 The Bates ending in 280. 07:32

7 A. Okay. Yeah, I'm looking at this. 07:32

8 Q. Okay. Do you see the bottom e-mail where you 07:32

9 wrote: 07:32

10 "Hi all. Ads identity team is currently working on 07:32

11 a project to detect third-party cookie-blocking 07:32

12 browsers"? 07:32

13 A. Yes. 07:32

14 Q. And you are a member of the ads identity team; 07:32

15 correct? 07:32

16 A. Yes. 07:32

17 Q. And who else was a member of the ads identity 07:32

18 team at this point in October 2020? 07:32

19 A. Bert and Chris. 07:32

20 Q. So you were working with them on this project 07:32

21 to detect third-party cookie-blocking browsers? 07:32

22 MR. ANSORGE: Objection. Form, and vague. 07:33

23 THE WITNESS: I was working with Bert and 07:33

24 Chris on this third-party cookie-blocking browser 07:33

25 project. 07:33

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1 [REDACTED] 08:22

2 [REDACTED]? 08:22

3 A. Yes. 08:22

4 Q. And that's referring to the rate according to 08:22

5 your dashboard; correct? 08:22

6 A. Yes. 08:22

7 Q. So on January 27th, your dashboard said that 08:22

8 the incognito rate is around [REDACTED] or [REDACTED] percent. 08:22

9 But now on February 3rd, the dashboard is 08:22

10 saying the incognito rate is around [REDACTED] percent; fair? 08:22

11 A. Yes. 08:23

12 MR. ANSORGE: Objection. Compound. 08:23

13 BY MR. FRAWLEY: 08:23

14 Q. And why was that good news? 08:23

15 A. Because it's closer to the number Bert told 08:23

16 me. 08:23

17 Q. What did Bert say about this good news? 08:23

18 A. I don't remember exactly. 08:23

19 Q. And what, if anything, did you do -- well -- 08:23

20 yeah. Sorry. Let me restart. 08:24

21 What, if anything, did you do between 08:24

22 January 27th and February 3rd? 08:24

23 MR. ANSORGE: Objection. Vague. 08:24

24 THE WITNESS: Could you be more specific? 08:24

25 ///

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1 BY MR. FRAWLEY: 08:24

2 Q. Right. 08:24

3 What, if anything, did you change that 08:24

4 resulted in the rate from your dashboard going from 08:24

5 around ■ to ■ percent to then going down to around 08:24

6 ■ percent? 08:24

7 A. I didn't do anything. 08:24

8 Q. So then how can you explain the rate going 08:25

9 from ■ to ■ percent to around ■ percent? 08:25

10 A. It's because on January 27th, the change that 08:25

11 makes the incognito rate from ■ or ■ percent to 08:25

12 ■ percent has -- hasn't rolled out yet. 08:25

13 Q. Did you say "the change"? 08:25

14 A. Yes. 08:25

15 Q. What do you mean -- what's the change? 08:25

16 A. To exclude mobile app traffic from Chrome 08:25

17 traffic. 08:26

18 Q. When was that change rolled out? 08:26

19 A. I think it's between January 27th and 08:26

20 February 3rd. 08:26

21 Q. Okay. Let me introduce a new exhibit. 08:26

22 (Plaintiffs' Exhibit 8 was 08:26

23 marked for identification.) 08:26

24 BY MR. FRAWLEY: 08:27

25 Q. Okay. I've introduced Exhibit 8. 08:27

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1 Please let me know when you have Exhibit 8 in 08:27
2 front of you. 08:27
3 A. Yeah. I'm looking at Exhibit 8. 08:27
4 Q. Okay. Exhibit 8 is a list of logs; correct? 08:27
5 A. Exhibit 8 is an email that has a list of logs. 08:27
6 Q. And is this the list of logs that has the 08:27
7 [REDACTED] field? 08:28
8 A. Looks like, yes. 08:28
9 Q. Now, if you know, when was the 08:28
10 [REDACTED] field added to these logs? 08:28
11 MR. ANSORGE: Objection. Compound. 08:28
12 THE WITNESS: I'm not sure of the exact date. 08:28
13 BY MR. FRAWLEY: 08:28
14 Q. Was it the same date for every single log or 08:28
15 was it added to different logs at different times? 08:28
16 A. It was added at one time. 08:29
17 Q. Sorry. So for each log it was added at the 08:29
18 exact same time; right? Is that what you mean? 08:29
19 A. Yes. 08:29
20 Q. And you explained earlier that a Boolean field 08:29
21 means that it can only be true or false; correct? 08:29
22 A. Yes. 08:29
23 Q. So right now, today, could you -- sorry. Let 08:29
24 me restart. 08:29
25 Right now, today, could someone at Google run 08:29

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1 a search for every single log entry where 08:29

2 [REDACTED] shows up as true? 08:29

3 MR. ANSORGE: Objection. Foundation. And 08:30

4 calls for speculation. And form. 08:30

5 THE WITNESS: I think that only someone with 08:30

6 certain permission to the logs -- to access the logs 08:30

7 may query the log to see this Chrome_incognito -- 08:30

8 [REDACTED] Boolean field. 08:30

9 BY MR. FRAWLEY: 08:30

10 Q. And that person could run a query for 08:30

11 [REDACTED] equals true? 08:30

12 A. Yes. 08:30

13 Q. Now, can you just explain to me at a high 08:31

14 level the logic that goes into making the choice of 08:31

15 whether something should be labeled true for 08:31

16 [REDACTED]? 08:31

17 MR. ANSORGE: Objection. Form and vague. 08:31

18 THE WITNESS: The high level logic, you mean 08:31

19 like -- could you specify what's high level logic? 08:31

20 BY MR. FRAWLEY: 08:31

21 Q. Sure. 08:31

22 Like what kind of information is the field 08:31

23 using or looking at to decide whether it's going show up 08:31

24 as true? 08:31

25 A. I will be -- so the input for determining this 08:32

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1 [REDACTED] Boolean field will include the absence 08:32
2 of X-Client-Data header and also whether the request is 08:32
3 from WebView and also if the request is from OS or 08:32
4 macOS. 08:32

5 Q. And the information that you just listed, is 08:32
6 all of that information stuff that's already part of the 08:33
7 same list of logs? 08:33

8 MR. ANSORGE: Objection. Vague. 08:33

9 THE WITNESS: Do you mean are those input I 08:33
10 talk about, are they in the -- in this list of logs, or 08:33
11 do you mean -- 08:33

12 MR. FRAWLEY: Yes. That's exactly what I 08:33
13 mean. 08:33

14 THE WITNESS: Okay. So my input -- my input 08:33
15 for like determining the [REDACTED] Boolean field 08:33
16 will not -- are not logged in this log. 08:34

17 MR. FRAWLEY: Okay. Could we do like a 08:34
18 five-minute break, Ms. Liu? 08:34

19 THE WITNESS: Okay. 08:34

20 MR. FRAWLEY: Okay, Joey? 08:34

21 MR. ANSORGE: Yeah. Fine by me. Should we 08:34
22 reconvene at 20 to the hour? 08:34

23 MR. FRAWLEY: Yes. 08:34

24 MR. ANSORGE: Does that work? 08:34

25 MR. FRAWLEY: Perfect. 08:34

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